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NEW RECORDS OF NEOTROPICAL GENTIANACEAE—II

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This series of notes on an undescribed species of *Lisianthus*, and notable records in three other genera, *Centaurium*, *Lehmanniella*, and *Macrocarpaea*, supplements an earlier summary of current studies on neotropical Gentianaceae.¹

Centaurium

1. *Centaurium pulchellum* (Sw.) Hayek, Oesterr. Bot. Zeitschr. 56:70. 1906.

Gentiana centaurium var. L., Sp. Pl. 1: 230. 1753.

Gentiana pulchella Swartz, Kongl. Vetensk. Akad. Nya Handl. för år 1783: 85. t. 3. figs. 8, 9. 1783.

Erythraea ramosissima Pers., Syn. 1:283. 1805.

This much named European centaury may be distinguished from the related *Centaurium umbellatum* Gilib. by the generally loosely branched cymose-paniculate inflorescence, the smaller cauline and the always inconspicuous basal leaves withering at anthesis, and the generally lower habit of the plant. Some collections studied are transitional between the two species, however, and these individuals have been made the basis of several described microspecies in Europe. The synonymy of these forms was already complicated a century ago when Grisebach prepared the account of the family for the *Prodromus*,² under the name *Erythraea ramosissima* Pers. Grisebach did refer at that time to its introduction into the Americas. William Darlington reported it as first detected in Chester County, Pennsylvania, in July, 1835, but it has not evidently persisted as an aggressively spreading species in our flora.³ Muhlenberg noticed the species even earlier under the name *Chironia pulchella* as a species of the Pennsylvania flora⁴ but the full details of that intricate story must await a search in the historic collections at Philadelphia now in progress.⁵

Outside of the United States early collections of *Centaurium pulchellum* were made in the West Indies, first in Bermuda at St. George, May 23, 1854, I. F. Holton 469 (K⁶), and another collection labelled simply "Bermuda" without definite locality, Dec. 11, 1873, by the botanists of the *Challenger Expedition* (K). It was collected even earlier in Jamaica, without definite locality data being recorded, probably in 1838, by Dr. Gilbert McNab (K), and more recently on the island, at Morces Gap,

¹Proc. Biol. Soc. Wash. 63:163-166. 1950.

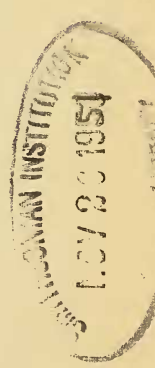
²DC., *Prodromus* 9:57. 1845.

³Flora Cestrica ed. 2. 126. 1837.

⁴Catalogue, 24. 1813.

⁵F. W. Pennell, Proc. Amer. Philos. Soc. 94:138. 1950.

⁶Abbreviations follow Index Herbariorum (Chron. Bot. 5:142. 1939).



5000 ft., *Geo. E. Nichols* 24 (K). For South America I have seen an early collection made in Uruguay: Montevideo, Dec. 1869, *Gibert* 932 (K). But it is in the Argentine that *Centaurium pulchellum* has become thoroughly established and evidently a fairly frequent weedy species in the provinces of Buenos Aires and Mendoza. Dr. Humberto A. Fabris, Museo La Plata, Argentina, has communicated a series of specimens illustrating the variations in branching, density of panicles, and leafiness among the colonies of that country. Representative collections are: Prov. Buenos Aires: Punta Lara, Jan. 24, 1949, *Fabris* 273 (NO), same loc., Jan. 4, 1940, *Genevieve Dawson* 930 (NY); Segui, Dec. 8, 1939, *A. L. Cabrera* 5632 (NY); Cocuodoro Rivadario, March, 1943, *Stefanic* (NO); La Balandea, Dec. 19, 1948, *Fabris* 249 (NO); Castelli, Jan. 2, 1942, *Lagus* (NO); *sine loco*, *J. Walther*, Dec. 25, 1945, (NO).

2. *Centaurium umbellatum* Gilib., Fl. Lithuanica 1:35. 1781.

Just as *Centaurium pulchellum* has become thoroughly naturalized in parts of South America but remains a rare adventive in North America, *Centaurium umbellatum* reverses the pattern with well established colonies in widely scattered parts of the United States (e.g. California and New York) but is known from South America by only a few isolated collections. The South American collections of this species that have come to my notice are: Colombia: hacienda Obonuco, Pasto, 2550 m., Dept. Nariño, March 28, 1950, *R. Espinosa* 2767 (NO), where it is reported as infrequent. Chile: Apoquindo, 700 m., Dec. 1924, *Clarence Elliott* 102 (K); Tuscnada, 100 m., Llanguihue, *Werdermann* 673 (K). Argentina: Teurlingham, Prov. Buenos Aires, Jan. 1941, *Helga Schwabe* 193 (NO).

There is some evidence that the local Brazilian phase of this naturalized European species may represent a distinct form. It is represented by *Glaziov* 6642 (K), from the Province Rio de Janeiro.

Lehmanniella

3. *Lehmanniella splendens* (Hook.) Gilg

This showy scandent gentian of Colombia with crimson-scarlet flowers, the subject of a recent review,⁷ was locally plentiful in partial shade along the borders of the rain forest between the settlements of "El Socorro" and "Mulatto" in the San Lorenzo watershed, Rio Miel drainage, Dept. of Antioquia, 400 ft. ele., June 2, 1944, *Ewan* 15,787 (USNA, COL. NO), as a shrubby vine clambering over the other vegetation. Dr. Earl L. Core, with whom I travelled down the Rio La Miel to the Magdalena River, collected this plant at the same station. To one familiar with the chaparral of southern California in the spring the habit and posture of *Lehmanniella* recalls *Penstemon cordifolius*, and, like that scarlet-flowered climber, is likely visited by hummingbirds.

Lisianthus

4. *Lisianthus browallioides* n. sp.

Epiphytic shrub 2 m. high, the branches slender, finely fluted; leaves few and scattered, reduced to foliar bracts above, conspicuously petiolate, the petioles slender, 2 cm. long, joined by their bases into a low collar-like ring, the blades thin, dark green above, lighter green beneath, ovate, acuminate, the veins distinct below, obscure above, amphiglabrous, 6.5-8

⁷Caldasia 5:87-89. 1948.

cm. long, 3.5-4 cm. wide; flowers cymosely paniculate, 1-3 borne at the tips of the widely spreading panicle branches, very shortly pedicellate, the pedicels bracteate; calyx shallowly campanulate, 10-11 mm. long, puckered at the sinuses, the lobes flaring, lance-acuminate up to the subcaudate tips, dark-brown, paler and thin-scarious on the margins; corolla campanulate, white, fading cream-colored, veins obscure but concolorous, 30-34 mm. long (including the lobes), strongly flaring at anthesis, suggesting the genus *Browallia*, the lobes lance-acuminate or abruptly cuspidate at anthesis, very finely erosulate; stamens not exerted; stigma bilamellate, the lobes spatulate, connivent; fruit and seeds unknown.

Frutex epiphyta, 2 m. alta, parte superiore caulis gracilis, striata; foliis paucis, superioribus reductis, prominente petiolatis, laminis ovatis, acuminatis, membranaceis, supra saturate viridibus, subtus pallidioribus, utrinque glabris, costa et venis subtus secundariis manifestis, supra obscuris, 6.5-8 cm. longis, 3.5-4 cm. latis, petiolis tenuis, mediocriter amplexicaulis, 2 cm. longis; floribus sparse cymoso-paniculis, 1-3 ad apicem ramosis, brevem pedicellis, pedicellis bracteatis; calyce turbinato-campanulato, 10-11 mm. longis, crispato ad sinum, lobis patentibus, lanceolatis et acuminatis, subcaudatis, obscure brunneis, margine pallidiore, hyalino-scariosis; corolla campanulata, alba sed post anthesin ochroleuca, venis obscuris et concoloris, 30-34 mm. longis (lobis inclusis), limbo dilatato, lobis lanceo-acuminatis vel abrupte cuspidatis, minute erosulatis; staminibus inclusis; stigma bilamellata, lobis spatulatis conniventibus; capsula et seminibus ignotis.

Type collected in "tops of huge trees" on Robalo Trail, northern slopes of Cerro Horqueta, 6000-7000 feet ele., Prov. de Bocas del Toro, Panama, August 5-7, 1947, by Paul H. Allen 4932 (MO).

Lisianthus browalliioides is unlike any other species of the genus, constituting in a sense a separate section for its singular flaring campanulate corollas. Its shrub habit is also at variance with the familiar species of *Lisianthus*, *sensu stricto*, of tropical America as known from Central America and the West Indies. Its true position must await a comprehensive study of the genus as a whole with more material at hand than is available in this country alone.

Macrocarpaea

5. *Macrocarpaea glabra* (L.f.) Gilg

The first record for the Cordillera Central of Colombia for this species believed to be "localized in the Bogota region"⁸ is from Mendez, northeast of Silvia, Dept. of Cauca, 3000-3100 meters, Oscar Haught 5105 (US). Haught records that only one plant was seen.

6. *Macrocarpaea stenophylla* Gilg

The third collection of this localized Peruvian species was made in dry sandy soil, on Cerro de Fraijaco (Huani-Huni), northeast of Tambo de Ventilla, 3200-3400 meters ele., Dept. Amazonas, Peru, July 7, 1948, F. W. Pennell 15,861 (PH). Dr. Pennell records the shrub as having "corollas pale yellow (baryta yellow)." All three collections studied are morphologically very uniform.

7. *Macrocarpaea subcaudata* Ewan, Contr. U. S. Nat. Herb. 29:224. 1948.

⁸Contr. U. S. Nat. Herb. 29:227. 1948.

Among the unsorted sheets of Gentianaceae at the New York Botanical Garden Herbarium there turned up the second sheet of this species, an isotype, which supports the characters previously employed in distinguishing the species of Costa Rica. The label bore no additional information as to the origin of the specimen over my conjectural remarks.

8. *Macroparpea glaziovii* Gilg, Bot. Jahrb. Engler 22:335. 1897.

This Brazilian species was discussed in the supplement to my revision of the genus *Macroparpea*⁹ as being a "doubtful species," suggesting an affinity with *M. rubra* Malme but differing in certain particulars enumerated there. Subsequently I found J. F. Macbride had photographed the type at the Botanical Museum of Copenhagen and the Chicago Museum of Natural History had issued the print as their number 22740 in the series of photographs of type specimens. Now through the cooperation of Dr. O. Hagerup of the Copenhagen Museum I have been able to study this type, which consists of two sheets of the same collection overlapped by Macbride for purposes of photographing.

Macroparpea glaziovii is a distinct species of the section *Tabacifoliae*, differing from the two other Brazilian species, *M. rubra* and *M. obtusifolia* but more closely related to the latter species. *Macroparpea glaziovii* would be sought in my key (*op. cit.* 216-219) near *M. obtusifolia*, from which it differs in having the usually shorter smaller corollas borne erect but particularly in having the calyx subglabrous with only a few scattered black hairs; near *M. corymbosa*, from which it differs in having the calyx tube truncate or broadly cupulate at the base; and near *M. pachystyla*, from which it differs in having the panicle more congested, and from all of these species *M. glaziovii* differs in its broadly goblet-shaped corolla with its large open throat, 2 cm. wide, while the corolla tube itself is short, only 2.5 cm. long, and the ovate corolla lobes 8-10 mm. long, tending to be paler toward the margins. The calyx is deeply divided in the manner of *Macroparpea guttifera* but it does not otherwise resemble that Amazonian species.

The type of *Macroparpea glaziovii* bears a field ticket in pencil in Glaziou's hand [*teste* O. Hagerup] reading "Tijuca, 7 O[cto]bre 1871," which then may be construed as the type locality. This locality in the State of Rio de Janeiro was visited by the English collector, George Gardner, in 1836.

⁹Contr. U. S. Nat. Herb. 29:248. 1948.